

CLAIMS

Claim 1. (currently amended) An isolated nucleotide sequence comprising a dystrophin minigene encoding a protein consisting of:

- (a) a N-terminal domain;
- (b) four to six rod repeats;

© (c) an H1 domain of a dystrophin protein and an H4 domain of the dystrophin protein; and

(d) a cysteine-rich domain wherein the N-terminal domain is selected from a group consisting of a N-terminal domain of the dystrophin protein, a modified N-terminal domain of the dystrophin protein, and a N-terminal domain of a utrophin protein; the rod repeats are selected from a group consisting of rod repeats in the dystrophin protein, rod repeats in the utrophin protein, and rod repeats in a spectrin protein; the cysteine-rich domain is the cysteine-rich domain of the dystrophin protein ~~or~~ or the utrophin protein, and

wherein the dystrophin minigene is capable of ameliorating dystrophic pathology when expressed in a dystrophic muscle.

Claim 2. (currently amended) An isolated nucleotide sequence comprising a dystrophin minigene encoding a protein consisting of:

- (a) a N-terminal domain;
- (b) four to six rod repeats;

(c) H1 domain of a dystrophin protein and an H4 domain of the dystrophin protein;

(d) a cysteine-rich domain; and

(e) the last three amino acids of a C-terminal domain of the dystrophin protein, wherein the N-terminal domain is selected from a group consisting of a N-terminal domain of the dystrophin protein, a modified N-terminal domain of the dystrophin protein, and a N-terminal domain of a utrophin protein; the rod repeats are selected from a group consisting of rod repeats in the dystrophin protein, rod repeats in the utrophin protein, and rod repeats in a spectrin protein; the cysteine-rich domain is the cysteine-rich domain of the dystrophin protein ~~or~~ or the utrophin protein, and wherein the dystrophin minigene is capable of ameliorating dystrophic pathology when expressed in a dystrophic muscle.

Claim 3. (currently amended) An isolated nucleotide sequence comprising a dystrophin minigene encoding a protein ~~comprising~~ or the complement of the dystrophin minigene, wherein the protein comprises:

(a) a N-terminal domain of a dystrophin protein or a modified N-terminal domain of the dystrophin protein;

(b) four to six rod repeats of the dystrophin protein;

(c) an H1 domain of a dystrophin protein and an H4 domain of the dystrophin protein; and

(d) a cysteine-rich domain of the dystrophin protein, wherein said nucleotide sequence has fewer than 5,000 nucleotides.

Claim 4. (previously presented) The isolated nucleotide sequence of claim 3, further comprising an H2 domain of the dystrophin protein, or an H3 domain of the dystrophin gene.

Claim 5. (previously presented) The isolated nucleotide sequence of claim 3, containing four rod repeats of the dystrophin protein.

Claim 6. (previously presented) The isolated nucleotide sequence of claim 3, containing five rod repeats of the dystrophin protein.

Claim 7. (previously presented) The isolated nucleotide sequence of claim 3, containing six rod repeats of the dystrophin protein.

Claim 8. (previously presented) The isolated nucleotide sequence of claim 3, consisting of SEQ ID NO:2, or which is the complement of SEQ ID NO:2.

Claim 9. (previously presented) The isolated nucleotide sequence of claim 3, consisting of SEQ ID NO:6, or which is the complement of SEQ ID NO:6.

Claim 10. (previously presented) The isolated nucleotide sequence of claim 3, consisting of SEQ ID NO:9, or which is the complement of SEQ ID NO:9.

Claim 11. (previously presented) The isolated nucleotide sequence of claim 3, consisting of SEQ ID NO:10, or which is the complement of SEQ ID NO:10.

Claim 12. (previously presented) The isolated nucleotide sequence of claim 3, consisting of SEQ ID NO:12, or which is the complement of SEQ ID NO:12.

Claim 13. (previously presented) The isolated nucleotide sequence of claim 3, consisting of SEQ ID NO:14, or which is the complement of SEQ ID NO:14.

Claim 14. (original) A recombinant adeno-associated virus vector, comprising the nucleotide sequence of claim 1 operably linked to an expression control element.

Claim 15. (original) The recombinant adeno-associated virus vector of claim 14, wherein the expression control element is an MCK promoter or a CMV promoter.

Claim 16. (original) A recombinant adeno-associated virus vector, comprising any one of the nucleotide sequence of claim 8, 9, 10, 11, 12 and 13, operably linked to an expression control element.

Claim 17. (original) The recombinant adeno-associated virus vector of claim 16, wherein the control element is an MCK promoter or a CMV promoter.

Claims 18-23 (canceled)

Claim 24. (previously presented) A recombinant adeno-associated virus vector, comprising the nucleotide sequence of claim 9, operably linked to an expression control element.

Claim 25. (previously presented) A recombinant adeno-associated virus vector, comprising the nucleotide sequence of claim 10, operably linked to an expression control element.

Claim 26. (previously presented) A recombinant adeno-associated virus vector, comprising the nucleotide sequence of claim 11, operably linked to an expression control element.

Claim 27. (previously presented) A recombinant adeno-associated virus vector, comprising the nucleotide sequence of claim 12, operably linked to an expression control element.

Claim 28. (previously presented) A recombinant adeno-associated virus vector, comprising the nucleotide sequence of claim 13, operably linked to an expression control element.